UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TEXAS 75202-2733

May 16, 1998

FINDING OF NO SIGNIFICANT IMPACT

To Interested Agencies, Officials, Public Groups and Individuals,

The U.S. Environmental Protection Agency (EPA) has performed an environmental assessment in accordance with the procedures at 40 CFR Part 6, "*Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act*," for the following proposed action:

Proposed Action: Awarding of U.S. Environmental Protection Agency grant funds from the Border Environmental Infrastructure Fund for a Water and Wastewater Treatment Plant Construction Project.

Applicant: City of Donna, Hidalgo County, Texas

Total Project Cost:	$ 23,845,000.00
Estimated EPA CWTAP II Grant Share:	$ 2,562,500.00
Estimated TWDB EDAP Water Grant Share:	$ 4,950,000.00
Estimated TWDB EDAP Wastewater Grant Share:	$ 2,562,500.00
Estimated TWDB WSA Loan Share:	$ 6,795,000.00
Estimated TWDB SRF Loan Share:	$ 2,775,000.00

(Remaining project costs may be funded by grants or loans. Specific funding amounts are unknown at this time).

Proposed Project. The city of Donna, located in the western part of the Rio Grande Delta in extreme South Texas, proposes to expand the water distribution system to serve the "colonias" (or subdivisions) which do not presently have drinking water or wastewater service. At the time most of the colonias were platted, no water or wastewater planning was required in subdivision design. The city of Donna and the 20 colonias, located on the periphery to the south, east, and west of the city of Donna, do not have a sewage collection system. Many residents use pit privies or septic systems that do not meet State or county standards, primarily due to the small size of the lots and the density of development (Rust, Lichliter/Jameson. 1997). The density of development, coupled with relatively impermeable soils, shallow ground water, and small areas of 100-year floodplain, poses a clear threat to public health and safety that includes contamination of both surface and ground water sources. The colonias are partially served by the North Alamo Water Supply Corporation (NAWS) water distribution system and the Colonia Nueva Water Distribution System, Inc. Only nine of the colonias have water service.

The city of Donna proposes to build a 4.5 million gallon per day (MGD) replacement for the

existing water treatment plant (WTP) on a new 18-acre site on the city's southwest side, and build an inter-connect with the NAWS to provide an additional 1.5 MGD capacity. The city also proposes to expand the wastewater collection system to eliminate the densely-packed septic systems in the colonias and to rehabilitate and expand its existing 3.0 MGD complete mix, activated sludge wastewater treatment plant (WWTP). The WTP is currently being rehabilitated to meet short term demands, but remains under-sized for projected demands. The WWTP is under enforcement action due to multiple effluent violations. Hydrogen sulfide gas is also a major problem. In addition, within the city of Donna, most sewage lift stations experience overflows because pumping capacity is not adequate.

The Donna project will be funded by a combination of grants and loans from the EPA Colonias Wastewater Treatment Assistance Program (CWTAP), the Economically Distressed Areas Program (EDAP), the Water Development Fund's Water Supply (WSA) Account, and the State Water Pollution Control Revolving Fund (SRF), all administered by the Texas Water Development Board (TWDB). The EPA grant share will fund 50 percent of that portion of the capacity of WWTP which is equal to the projected wastewater flows from the colonias. The remaining 50 percent of the WWTP capacity cost is included in the TWDB Wastewater Grant Share. Costs which are ineligible for EDAP or CWTAP participation are included in the WSA and SRF loan amounts listed above.

Finding. The EPA has performed an evaluation of the Environmental Assessment (EA) prepared by the TWDB for the CWTAP funding of the Donna project and concurs with the Finding of No Significant Impact (FNSI) issued on July 10, 1997. No new factors or issues have been introduced into the proposed action to alter the finding or to require an increase to the scope of the assessment. On the basis of this EA, the Regional Administrator has determined that awarding of grant funds to assist the city of Donna project will not result in significant adverse impacts on the environment and that an Environmental Impact Statement (EIS) is not warranted. Comments regarding this determination not to prepare an EIS will be accepted during the thirty (30) day period following the public notice of this FNSI. Address all comments and requests for review of the administrative record supporting this determination to:

Robert D. Lawrence (6EN-XP)
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Telephone: (214) 665-2258

ENVIRONMENTAL ASSESSMENT

FOR THE AWARDING OF

U.S. ENVIRONMENTAL PROTECTION AGENCY

GRANT FUNDS

FROM THE BORDER ENVIRONMENTAL INFRASTRUCTURE FUND

FOR CONSTRUCTION OF THE WATER AND WASTEWATER

TREATMENT PLANTS PROJECT

FOR THE CITY OF DONNA, HIDALGO COUNTY, TEXAS

/United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Approved: /S/ 4/20/98
Jerry Clifford Date
Acting Regional Administrator

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1.0 PURPOSE AND NEED FOR ACTION

1.1 General Information.

Proposed Action: Awarding of U.S. Environmental Protection Agency grant funds from the Border Environmental Infrastructure Fund for a Water and Wastewater Treatment Plant Construction Project.

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1.2 Proposed Project. The city of Donna, located in the western part of the Rio Grande Delta in extreme South Texas, proposes to expand the water distribution system to serve the "colonias" (or subdivisions) which do not presently have drinking water or wastewater service. At the time most of the colonias were platted, no water or wastewater planning was required in subdivision design. The city of Donna and the 20 colonias, located on the periphery to the south, east, and west of the city of Donna, do not have a sewage collection system. Many residents use pit privies or septic systems that do not meet State or county standards, primarily due to the small size of the lots and the density of development (Rust, Lichliter/Jameson. 1997). The density of development, coupled with relatively impermeable soils, shallow ground water, and small areas of 100-year floodplain, poses a clear threat to public health and safety that includes contamination of both surface and ground water sources. The colonias are partially served by the North Alamo Water Supply Corporation (NAWS) water distribution system and the Colonia Nueva Water Distribution System, Inc. Only nine of the colonias have water service.

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1.3 Recommendation. The EPA has performed an evaluation of the Environmental Assessment (EA) prepared by the TWDB for the CWTAP funding of the Donna project and concurs with the Finding of No Significant Impact (FNSI) issued on July 10, 1997. No new factors or issues have been introduced into the proposed action to alter the finding or to require an increase to the scope of the assessment. On the basis of this evaluation, the Regional Administrator has determined that awarding of grant funds to assist the city of Donna will not result in significant adverse impacts on the environment and that an Environmental Impact Statement (EIS) is not warranted. The present EA/FNSI are predicated on the findings as described in the TWDB's 1997 findings. The conditions of that document concerning either threatened or endangered plant or animal and bird species remain in effect. The proposed project is consistent with the EPA approved Water Quality Management Plan.

2.0 ALTERNATIVES.

2.1 Alternatives Available to the EPA.

Approve the Grant Funding for the Project as Proposed. EPA can recommend approval of the grant funding for the proposed purpose.

Grant Funding of a Modified Project. Information received during the EA process could result in the identification of significant adverse impacts that require modification. Modification of the project to mitigate the impacts may allow the EPA to accept the project as modified and recommend approval of the grant funding.

No Action. A determination that the project as proposed could result in potentially significant adverse impacts to the environment that cannot be satisfactorily mitigated would preclude a recommendation of approval of the grant funding. An EIS would then be recommended to evaluate the potentially significant impacts. The EIS process includes a scoping meeting to identify critical facts and issues, a Draft EIS, a public comment period on the Draft EIS, a public hearing on the Draft EIS, the Final EIS, a public comment period on the Final EIS, and a Record of Decision.

2.2 Alternatives Considered by the Applicant.

Six alternatives were examined, including:

1. Conventional gravity sewers. This alternative was selected as the most cost-effective, the easiest to operate and maintain over long periods. It also fits the City's preferences. Other wastewater collection alternatives considered included: pressure sewers; septic tank effluent pumps, and small diameter gravity sewers.

2. Replacement of individual septic systems. This alternative was eliminated due to institutional resistance and lack of mechanisms to insure on-going maintenance.

3. Cluster septic systems. This alternative was eliminated on much the same grounds as described in alternative #2.

4. Evapotranspiration effluent disposal systems. This alternative was eliminated on much the same grounds as described in alternative #2.

5. Land treatment. This alternative was eliminated because it cannot currently compete with irrigation water on the basis of cost.

6. No Action. This alternative was not selected given the potential human health and safety problems and the consequences to the environment in terms of pollution.

3.0 AFFECTED ENVIRONMENT AND PREDICTED ENVIRONMENTAL IMPACTS

3.1 Land Resources.

Site and Land Use. Irrigated agriculture has affected the present appearance of the Donna vicinity and the Rio Grande Delta in general. Beginning in the late 1800's, a complex system of pumping stations, irrigation canals, pipelines, and drains were developed throughout the region. Native vegetation has largely been removed and replaced by pasture, row crops, and citrus orchards. The topography itself has been significantly altered by leveling needed to allow for irrigation. In its native state, the vegetation in the areas away from streams and fossil channel depressions was probably a grassland comprised of tall bunch grasses. Areas near surface water bodies were more likely occupied by a woody brushland consisting of mesquite, granjeno, whitebrush, tasajillo, retama, Texas ebony, and prickly pear, such as still exists along the Rio Grande. Little of this survives in most of the planning area. Some vacant areas in Donna and its planning area contain a mixture of mesquite, acacia, and prickly pear that was present before development or which are regrowth which is occurring during the transition from agriculture to urban development. Surrounding agricultural land use, where not otherwise urban, is irrigated agriculture. Brushy areas also occur along irrigation and drainage ditches.

Land Use Changes. Although much of the planning area is developed, enough vacant areas remain for the population to nearly double over the next 20 years from the current estimate of about 15,000 to almost 30,000 by the year 2015. Because of the extensive, continuing development in Donna that is associated with growth driven by improved international trade, removal of prime agricultural lands from cultivation is happening at an increasing rate. However, impacts associated with this project are not considered to be adverse because they will mostly serve existing development.

Transportation. Traffic and pedestrian safety will be provided for by prompt backfilling. Construction will be done in conformance with Occupational Safety and Health Administration (OSHA) standards regarding the provision of barricades, flagmen, warning signs.

Noise. Noise will result from construction but will be limited by confining work to daylight hours and using equipment that meets OSHA standards.

3.2 Water Resources. The maximum monthly average wastewater treatment capacity will be 3.0 MGD, with effluent limits of 20 milligrams per liter (mg/l) of biological oxygen demand (BOD) and 20 mg/l of total suspended solids (TSS). The discharge will be to an unnamed ditch, then to the Main Floodway and Arroyo Colorado in Segment 2202 of the Nueces-Rio Grande Coastal Basin. Because discharges over 1.0 MGD are considered major discharges under the Clean Water Act, both the State discharge permit and the National Pollutant Discharge Elimination System (NPDES) permits are anticipated to require that the effluent be dechlorinated to have less than 0.1 mg/l of chlorine residual. Sludge will be taken by licensed, contracted haulers to permitted land disposal sites outside the Hidalgo County. With the proposed expansion, the city of Donna will have adequate water supply and treatment capacity to provide service to the colonias in its planning area through the design population of about 29,750 in 2015. The city of Donna is a Designated Management Area for collection and treatment of sewage.

Sediments generated by construction, and the associated erosion and siltation of area waterways will be controlled by the best available control standards, such as temporary settling pits, dikes, and berms. Prompt backfilling of trenches and protecting soil stockpiles will also serve to reduce any potential problems.

3.3 Air Quality. Donna is in an attainment areas for the National Ambient Air Quality Standards. The climate of the region is subtropical and subhumid, and influenced by proximity to the Gulf of Mexico. Winds are predominantly strong and from the south. Precipitation averages about 23 inches of rain per year. Freezing temperatures are unusual, and the growing season lasts 341 days, but freezes capable of damaging the citrus orchards did occur twice during the 1980's. The region’s semi-aridity allows evaporation to exceed precipitation by 8 inches per year. Air quality is good because the area has thermal and mechanical mixing conditions that allow good dispersal of pollutants.

The caliche base, asphalt topped streets in the area could present a problem with dust and

mud, depending upon weather. Dust will be controlled by periodic wetting of the construction areas. These problems should be minimal due to facility design and adherence to the buffer zones which are a part of the State Design Criteria for permitted wastewater facilities.

3.4 Biotic Resources.

Biotic Changes. According to the TWDB, the Rio Grande Delta area has a unique biota when compared to the rest of Texas and the United States. One biologist even considers the area a separate biotic district. The U.S. Fish and Wildlife Service (FWS) believes that the clearing of brush associated with the cleaning drainage ditches to install project related pipelines to be a threat to migratory birds, such as waterfowl, colonial waterbirds, and neotropical migrant species found in the area primarily during the spring and summer (consultation #2-11-95-I-296). A condition of FWS approval of this project is the scheduling of construction related brush clearing to avoid the peak nesting period of April 15 to July 15. Future financial assistance will be conditioned to require that brush-clearing not occur during the peak nesting period of April 15 to July 15 to avoid impacts to the species under the jurisdiction of the Migratory Bird Treaty Act. All areas where native vegetation is disturbed will be returned to grade and revegetated with grass, where appropriate.

3.5 Cumulative Impacts and Other Environmental Considerations.

Wetlands: A few scattered wetlands occur across the city, all within excavated areas. The U.S. Army Corps of Engineers has noted in Determination Number D-6934 that no wetlands under the jurisdiction of the Clean Water Act will be affected by the project.

Floodplain: Floodplains in Donna are confined to aeolian depressions, fossil deltaic channels, and the man-made drainage ditches that are found primarily in three areas in the community. Project construction of the water distribution lines and wastewater collection lines will affect one area along FM 493 on the south side of town. However, given the existing development and the participation of Hidalgo County and the city of Donna in the National Flood Insurance Program, no significant adverse impacts to the floodplain are expected. A Floodplain Management Notice was circulated for the project with the Environmental Information Document. Due to the prohibitions in the TWDB rules, any subsequent financial assistance will be conditioned to require that no wastewater generated by development located within the 100-year floodplains shall be treated or transported by the project facilities without the express written consent of the TWDB. This restriction does not apply to development which, by its nature, must be located on or adjacent to water, to development which existed (as defined by the TWDB Rule, 31 TAC 375.35[d][3]) at the time of the issuance of the TWDB FNSI or to development which can be shown to be consistent with the Federal Emergency Management Agency's floodplain criteria for flood prone areas (40 CRF Part 60.3) and will have no significant impacts on the natural functions and values of the floodplains.

Cultural Resources. Due to the prior modification of the land surface by agriculture and urban development, historic or prehistoric archeological sites that may have been present in the area

have probably been destroyed or substantially altered. The Texas Historical Commission (THC) has concurred with the assessment by a TWDB staff archeologist that no significant cultural resources would be affected by the project. However, subsequent grant or loan activity will be conditioned to require that if any historic or prehistoric archeological sites are discovered during construction, activity will cease immediately in that area, the site will be protected from further disturbance, and the city of Donna will notify the EPA, the TWDB and the THC of the discovery. The EPA and the TWDB shall than proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) prior to taking any action which would affect the cultural resources.

Endangered Species. A number of threatened or endangered species designated by the Texas Parks and Wildlife Department (TPWD) and the FWS are known to occur in Hidalgo County. Federally listed species range from mammals such as the ocelot and jaguarundi, a number of birds such as the northern Aplomado falcon, American peregrine falcon, and Arctic peregrine falcon, and plants such as the Texas ayenia and Walker's manioc. The TPWD has noted the potential presence of several state-listed endangered species, including the black-spotted newt and Rio Grande lesser siren which could occur in resacas, canals, and drainage ditches, the white-lipped frog which may be found in grasslands, cultivated fields, and roadside ditches, the northern cat-eyed snake found in dense thickets along streams; and state-listed threatened species, such as the black-striped snake, Texas tortoise, Texas indigo snake, sheep frog, and Mexican treefrog which may occupy a variety of warm moist micro-habitats in semi-arid areas in the Valley.

As a consequence of the intense agricultural and urban development that has occurred in the region, the FWS and TPWD indicated that no impacts to Federally listed threatened or endangered species nor State-protected species are likely to result from this project. However, future financial assistance activity will be conditioned to require that should either threatened or endangered plant or animal species be encountered during construction, work shall be stopped immediately and the EPA, FWS, TPWD, and the TWDB will be notified in order that they can take measures in accordance with the Endangered Species Act of 1973, as amended.

Environmental Justice Issues and Socioeconomic. Although the use of the Environmental Justice (EJ) index tool in this instance is limited, a high EJ indicator, coupled with the beneficial nature of the environmental impacts associated with the project, gives the project a high priority and makes it a prime target for assistance. The EJ analysis is based on a comparison of (1) the percentage of minority people, (2) the percentage of economically stressed households making less than $15,000 a year, and (3) the population within a one-half mile and a four-mile radius of the site with the corresponding percentages for the state. High growth projections estimate the population for the planning area to reach almost 30,000 by the year 2015. The average home in Donna is occupied by slightly fewer than five residents, and according to the U.S. Census, the median annual household income of families in the three Census tracts making up the Donna project area averaged $17,000 in 1990. Presently, the planning area is comprised of over sixty percent Mexican extraction and a classified low income area. The make up of the area's population, its high population density, and the annual household income levels all indicate that

the area is economically stressed.

The colonias which make up portions of the Donna planning area in many ways typify the term colonia. Many were originally platted at a time when Hidalgo County did not require water or wastewater plans to be included in the design of subdivisions and the streets could be left unpaved. Development nonetheless proceeded as colonias often were the only means available to a low-income family to own their own home.

Cross-border Impacts. The primary adverse effects beyond the national boundary are limited to the periodic excursions of odors across the border from the wastewater treatment plant particularly during abnormal weather conditions. These events will be infrequent and of short duration, and will be attenuated primarily by the distance between the source plants and the sparsely populated areas across the border. Of significant benefit to the environment is the improved quality of the wastewater after treatment which will not have the same potential to be a source of odors. Other beneficial impacts expected from construction of the projects are the reduction in potential health vectors and communicable diseases through the elimination of the use of septic systems and and privies.

A potential by-product of the proposed treatment plants that may have both adverse and beneficial impacts on the socio-economic fabric of the area is the increased growth and development. The existence of a system to handle the wastewaters of the area may make it more appealing to industry and immigrants and tend to overload the system. However, these same phenomena may make it possible to improve the socio-economic well-being of residents of the area.

Other Factors. Other factors evaluated and determined not to be of significant or relevant consequence include radiation, solid or hazardous waste disposal, man-made hazards, natural hazards, and loading on infrastructures, municipal services and support systems, and health services and facilities. The project is not located within a county bordering the Gulf of Mexico and there are no coastal zone management areas that will be affected by the project.

4.0 OTHER ENVIRONMENTAL ISSUES CONSIDERED BY EPA

4.1 Unavoidable Adverse Effects. No significant adverse impacts on natural resources such as water and wastewater, community infra-structures such as public schools, emergency medical care, or public safety, recreation or transportation are expected to result from the direct, secondary or cumulative effects of the operational facility. The costs from the water and wastewater systems will result in a projected, combined monthly water and wastewater bill of $45.21 for a typical residential household.

4.2 Relationship Between Local, Short Term Use of the Environment and the Maintenance/Enhancement of Long Term Beneficial Uses. Construction and operation of the proposed system will result in medium to high benefits to the health and economy of the area. In the short term, there will be the inconveniences, the dust and sedimentation resulting from the

disturbance of the area for trenching of streets and connecting pathways to the WTP. However, the long term beneficial uses of the environment will result in better social and community setting because of the correction of a public health and safety hazard.

There are no unacceptable short or long term impacts to sensitive habitat, jurisdictional wetlands, or endangered or threatened species of plants, mammals, birds, reptiles, amphibians, and fishes are expected as a result of this project. Therefore, no mitigation action is proposed. No other local, state, or federal projects are planned or underway in the project area.

4.3 Irreversible and Irretrievable Commitment of Resources. Irreversibly and irretrievably committed resources associated with the facility are primarily the materials needed for the construction, the fossil fuels and energy resources needed to operate the facility.

5.0 ENTITIES TO WHOM COPIES OF THIS ENVIRONMENTAL ASSESSMENT WERE MAILED FOR REVIEW AND COMMENT

Copies of the EA have been provided to the following agencies and will be provided to groups, officials, and individuals on the general mailing list for review and comment. Interested parties may obtain copies of the EA by contacting the EPA, Office of Planning and Coordination (6EN-XP), 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733, or telephone 214-665-2258.

U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
U.S. Natural Resource Conservation Service; District Conservationist
Federal Emergency Management Agency
International Boundary and Water Commission
Texas Water Development Board
Texas Parks and Wildlife Department
Texas Historical Commission, State Historical Preservation Officer
Texas Natural Resource Conservation Commission
Hidalgo County
City of Donna

6.0 APPENDIX - FIGURES, TABLES AND COORDINATION LETTERS

Table 1. Colonias and Subdivisions to be Served by the City of Donna Water and Wastewater Treatment Project

Balli Number 2	Southpoint
Benita	South Donna
Clark	Sun Grove
East Salinas	Tierra Balli
I.B. Avila	Tierra del Sol Estates
LaDonna	Tierra Prieta
No Name	Val Verde Grove
Panfilo Martinez	Valley Grove
River Road	Valley View Estates
Schroeder	Villa Donna Number 22

6.0 FIGURES, TABLES AND COORDINATION LETTERS

7.0 REFERENCES AND ENDNOTES